

considered under the No Action Alternative. The use of tritium would remain the same as discussed under the No Action Alternative.

The low-level solid radioactive waste would increase from 70 cubic meters per year under the No Action Alternative to 190 cubic meters per year under the Proposed Action. The 190 cubic meters is nearly 60 percent of the estimated sitewide generation of low-level radioactive waste. These levels of waste generation are within the capacity for treatment, transportation, or storage. The other waste categories numbers would remain the same as the No Action Alternative numbers.

The estimated worker exposure for the NIF operations would be 19 person-rem per year for the Proposed Action. The No Action Alternative worker exposure would be 15 person-rem per year. The Proposed Action worker exposure of 19 person-rem per year is 20 percent of the LLNL estimated total worker population dose. The latent cancer fatalities (LCFs) projected under the Proposed Action for the NIF would be 1.1×10^{-2} . The LCFs projected under the Proposed Action for LLNL would be 5.5×10^{-2} . No individual will receive more than 500 millirem per year.

Reduced Operation Alternative Impacts

The Reduced Operation Alternative impacts would be less than the No Action Alternative impacts in several areas. These would include a reduction in the use of hazardous and radiological material, a reduction in waste generation, and a decrease in worker exposure. Under the Reduced Operation Alternative, the neutron spectrometer would not be constructed and there would be no experiments with plutonium; other fissile materials; fissionable materials, other than depleted uranium; or lithium hydride.

M.4 DESCRIPTION OF THE AFFECTED ENVIRONMENT

M.4.1 Environmental Setting

Chapter 4 of the LLNL SW/SPEIS describes the environmental setting and existing conditions associated with current operations at LLNL. This information forms a baseline for evaluating the environmental impacts associated with implementing the No Action Alternative, Proposed Action, and Reduced Operation Alternative. Information from Chapter 4 of the LLNL SW/SPEIS was used as a basis for analysis of the impacts presented in Section M.5 of this appendix.